PROJECT DESCRIPTION

I. GENERAL

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This project involves the modification of an existing mast arm pole Traffic Control Signal at the intersection of MD 482 (Hampstead Mexico Road) and Panther Drive in Carroll County due to the construction of MD 30 Relocated (Hampstead Bypass).

MD 482 is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- I. The intersection shall continue to operate in a NEMA four (4) phase, full-traffic-actuated mode, with the MD 482 (Hampstead Mexico Road) through movements operating concurrently. An Exclusive/Permissive (E/P) left turn phase shall continue to be provided for the westbound approach of MD 482. The E/P phase shall operate as a leading phase. The Panther Drive approach shall continue to operate alone.
- 2. A new NEMA eight-phase, full-actuated controller housed in a base-mounted size '6' cabinet shall be installed at this location.
- 3. Video camera presence detection shall be provided for the northbound Panther Drive and westbound MD 482 approaches.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables to the approapriate terminals and shall properly label each cable.
- 2. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- 3. Maintenance of Traffic Phases I and 2 consist only of adjusting video detection zones, relocating traffic signal heads/signs and relocating non-invasive probes; therefore, separate General Information drawings are not provided for these phases. Quantities for these phases are provided on this sheet.

CONTACT LIST

The contact persons for District #7 are as follows:

Mr. John Concannon Assistant District Engineer-Traffic 301-624-8140

Ms. Andrea Abend Assistant District Engineer-Utilities 301-624-8115

Mr. Eric Eckhardt Assistant District Engineer-Construction 301-624-8201

Mr. Ray Johnson Assistant District Engineer-Maintenance 302-624-8105

Mr. Richard L. Daff Chief. Traffic Operations Division 410-787-7630

Mr. Edward Rodenhizer Chief, SHA Traffic Signal Shop 410-787-7650

The Power Company Representative is: Baltimore Gas and Electric Company Mr. Bernie Thuman 7317 Parkway Drive South Hanover, MD 21076 410-859-9030

The Project Manager for MD 30 Relocated is: Corman Construction, Inc. Mr. Scott Szympruch

MICRO-LOOP DETECTOR LEAD-IN CABLE

5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

VIDEO DETECTION CAMERA LEAD-IN CABLE 2-CONDUCTOR TRAY CABLE

(NO. 12 AWG) STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)

PS PROPOSED POWER SERVICE PP PROPOSED TELEPHONE SERVICE PROPOSED GROUND ROD ML MICRO-LOOP PROBE

PROPOSED METERED SERVICE PEDESTAL

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALLED BY THE CONTRACTOR.

800000 801605	I EA 40 SF	NEMA CONTROLLER ASC 112000, SIZE '6' BASE-MOUNTED CABINET SHEET ALUMINUM SIGNS - MAST ARM MOUNTED
	I EA	D-3(I) "PANTHER DR" (VAR. × 16")
	I EA	D-3(I) "HAMPSTEAD MEXICO RD" (VAR. x 16")
	I EA	ASSOCIATED SHIELD ASSEMBLY (45" x 75")
816015	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT

PHASING

	R	(R) (V) (Q)	(R) (Y) (Q)	(P)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)	R) (Y-) (Y) (G) (G)	(R) (Y) (G)	RYG	RYQ	
	-	2	3	4	5	6	7	8	
PHASE 2 & 5	R	R	R	G ⊸ G−	ტ ი	G	R	R	-
2 & 5 CHANGE	R	R	R	G → Y	G → Y	Ģ.	R	R	*
PHASE 2 & 6	G	Ģ	G	G	G	G	R	R	4
6 CHANGE	Y	Υ	Y	Y	Υ	Υ	R	R	
PHASE 8	R	R	R	R	R	R	G	G	A
8 CHANGE	R	R	R	R	R	R	Y	Υ	

|FL/Y|FL/Y|FL/Y|FL/Y|FL/Y|FL/R|FL/R

FLASHING OPERATION

C.G.I.K.L.D-

C,D,F,G,I,K,L,O

<u></u> PS,0

C,G,I,

P\$\0-

K.L.0--

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

DESCRIPTION MOT_PRE-PHASE	CATEGORY		DE PRINTEN AND INSTALLED DE THE CONTINACTOR.
203030			DESCRIPTION
801004 5 CY CONCRETE FOR SIGNAL FOUNDATION 801607 37 SF INSTALL SHEET ALUMINUM SIGN 802501 250 LF NO. 6 AWG STRANDED BARE COPPER GROUND WIRE 805105 135 LF 2-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805118 140 LF 3-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805118 205 300 LF 4-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805125 25 LF 2-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805135 490 LF 3-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TENCHED 805136 490 LF 3-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TRENCHED 805130 15 LF 4-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TRENCHED 807202 1 EA METERED SERVICE PEDESTAL 810601 2 EA NON-INVASIVE DETECTOR, 500 FT. LEAD-IN CABLE 811001 8 EA ELECTRICAL HANDHOLE 811002 8 EA REMOVE ELECTRICAL HANDHOLE 816005 2 EA VIDEO DETECTION CAMERA 816005 2 EA CONTROL CABLE, 250 FT., VIDEO DETECTION CAMERA 800000 1 EA STEEL 15' 'T" POLE WITH TWIN 50'/60' MAST ARMS 837001 6 EA GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH 800000 3 EA 8 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION 860284 25 EA 12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION 861107 55 LF ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) 861116 230 LF ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) 871117 1 EA INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER 800000 LS REMOVE AND DISPOSE EXISTING EQUIPMENT 800000 LS REMOVE AND DISPOSE EXISTING EQUIPMENT 800000 GL F 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-TRENCHED 800000 LS REMOVE AND DISPOSE EXISTING EQUIPMENT 800000 LS REMOVE AND DISPOSE EXISTING PROBE 800000 LS REMOVE AND DISPOSE EXISTING PROBE 800000 LS REMOVE AND DISPOSE EXISTING PROBE 800000 LS		<u> TASE</u>	
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802501 250 LF		5 CY	CONCRETE FOR SIGNAL FOUNDATION
805105 135 LF 2-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805115 140 LF 3-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805118 205 380 LF 4-IN. PVC SCH. 80 ELECTRICAL CONDUIT-BORED 805125 25 LF 2-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TRENCHED 805135 490 LF 3-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TRENCHED 805140 15 LF 4-IN. PVC SCH. 80 ELECTRICAL CONDUIT-TRENCHED 807202 1 EA METERED SERVICE PEDESTAL 810601 2 EA NON-INVASIVE PEDESTAL 811001 8 EA ELECTRICAL HANDHOLE 811002 8 EA REMOVE ELECTRICAL HANDHOLE 811002 8 EA REMOVE ELECTRICAL HANDHOLE 816001 2 EA VIDEO DETECTION CAMERA TO CONTROLLER 80000 1 EA STEEL 15' "I" POLE WITH TWIN 50'/60' MAST ARMS TO CONTROLLER 810000 3 EA 8 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION 860284 25 EA 12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION 861108 940 LF ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) 861116 230 LF ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) 861116 230 LF ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) 871117 1 EA INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER 800000 120 LF 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-TRENCHED 800000 90 LF 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-TRENCHED 90 LF 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-TRENCHED 800000 1 EA RELOCATE EXISTING VIDEO DETECTION CAMERA 100000 1 EA RELOCATE EXISTING VIDEO DETECTION CAMERA 100000 2 EA RELOCATE EXISTING NON-INVASIVE PROBE 120773 7 SF RELOCATE EXISTING SIGNAL HEAD		37 SF	INSTALL SHEET ALUMINUM SIGN
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86 08 940 LF ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) 86 16 230 LF ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) 87 17 I EA INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT 800000	860284	25 EA	12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
86III6 230 LF ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) 87III7 I EA INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT 800000 LS REMOVE AND DISPOSE EXISTING EQUIPMENT 800000 I20 LF 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-TRENCHED 800000 90 LF 4-IN. PVC SCH. 40 ELECTRICAL CONDUIT-BORED MOT PHASE I 100000 I EA ADJUST VIDEO DETECTION ZONE 100000 I EA RELOCATE EXISTING VIDEO DETECTION CAMERA 100000 2 EA RELOCATE EXISTING NON-INVASIVE PROBE 120773 7 SF RELOCATE SIGN 860265 2 EA RELOCATE EXISTING SIGNAL HEAD	861107	55 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
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AND CABINET - BASE MOUNT REMOVE AND DISPOSE EXISTING EQUIPMENT 800000	861116	230 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
REMOVE AND DISPOSE EXISTING EQUIPMENT 800000	871117	IEA	INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER
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EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PRE-PHASE WIRING DIAGRAM

— D, F, N, O



4/1/08 - FIELD CHANGE

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY

TRAFFIC ENGINEERING DESIGN DIVISION MD 30 RELOCATED

FROM SOUTH OF WOLF HILL DRIVE TO NORTH OF HAMPSTEAD MD 482 (HAMPSTEAD MEXICO RD) AND PANTHER DRIVE

TRAFFIC SIGNAL-GENERAL INFORMATION

SCALE NONE	DATE08/	<u> </u>	CONTRACT NO	, CL4165370
CHECKED BY	JEH	COUNTY LOGMILE T.I.M.S. N		
TS NO. 4197B-GI	DRAWING SG-11	OF 19	SHEET NO.	23 OF 82

PLOTTED: Tuesday, April 01, 2008 AT 02:16 PM | ISSUED FOR CONSTRUCTION 8/30/07 - SUBMITTAL #20 FILE: P:\2005\05053900\Drawlngs\08-Traffb\Dwgs & Maps\Submittal19\psG-N004_md30-s20_Fletd Change.dgn

443-508-4370

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